
FULL TEXT OF CASES (USPQ FIRST SERIES)

Ex parte PFEIFFER, 135 USPQ 31 (BdPatApp&Int 1961)

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(BdPatApp&Int)

135 USPQ 31

Opinion dated Dec. 20, 1961

U.S. Patent and Trademark Office, Board of Patent Appeals and Interferences

Headnotes

PATENTS

1. Claims--Process (§ 20.80)

35 U.S.C. 100 (b) impliedly permits recitation of structure in method claims; mere inclusion of structure in method claim does not render claim unstatutory or fatally defective.

2. Claims--In general (§ 20.01)

Claims--Process (§ 20.80)

Patentability--New use or function-- In general (§ 51.551)

Board rejects contention that such structural limitations of method claims as are not disclosed by references should be given patentable weight; argument is applicable to claims drawn to structure, not claims drawn to method; to be entitled to such weight in method claims, recited structural limitations must affect method in manipulative sense and not amount to mere claiming of a use of a particular structure; new use is not among categories of patentable inventions specified in 35 U.S.C. 101.

3. Patentability--Subject matter for patent monopoly--Process, product and apparatus (§ 51.613)

Fact that structure has been found patentable does not ipso facto make patentable the method which is, in substance, the intended operation or use of the structure.

Particular patents--Air Delivery Process

Pfeiffer, Air Delivery Process, claims 9, 11 to 14, 16, and 24 to 26 of application refused.

Case History and Disposition:

Appeal from Division 22.

Application for patent of Paul O. Pfeiffer, Serial No. 607,185. From decision rejecting claims 9, 11 to 14, 16, and 24 to 26, applicant appeals (Appeal No. 231-17). Affirmed.

Attorneys:

MCCOY, GREENE & TEGROTENHUIS, Cleveland, Ohio, for applicant.

Judge:

Before KREEK, DRACOPOULOS, and FREEHOF, Examiners in Chief.

Opinion Text

Opinion By:

DRACOPOULOS, Examiner in Chief.

This is an appeal from the final rejection of claims 9 to 16, 24, 25 and 26 constituting all the claims then present in the application. Claims 10 and 15 were subsequently cancelled, Paper No. 18, and the appeal as to these claims will accordingly be dismissed, leaving claims 9, 11, 12, 13, 14, 16, 24, 25 and 26 for our consideration, claims 16 and 26 having been amended by Paper Nos. 15 and 18.

According to the examiner's answer, only claims 9, 12, 13, 24 and 25 have been correctly reproduced in the brief and a correct copy of the other appealed claims appears on pages 1, 2, and 3 of the answer.

Representative claims 9, 16 and 25 are as follows:

9. A method of transporting a free-flowing material from a moving air vehicle at substantial altitude to the ground below comprising the steps of dropping from said vehicle at said altitude a large hollow rubber bag having thin flexible extensible rubber walls which may be stretched radially several times their normal diameter, said bag being filled with several gallons of said material and when so filled and falling freely having a shape generally that of an oblate ellipsoid of revolution with a normally upright axis, the bag when so filled and resting on a flat horizontal surface normally having a height not substantially greater than about one-fifth its diameter, allowing the filled bag to drop freely while stabilizing movement of

the bag so that said axis remains upright during the fall to minimize the terminal velocity of the bag and is upright as the bag strikes the ground, said altitude being such that the bag reaches its terminal velocity before it strikes the ground, said walls having sufficient strength and elasticity yieldingly to absorb the impact without rupturing.

16. A method of transporting a free-flowing material from a moving air vehicle traveling at substantial altitude to the ground below, comprising the steps of filling with said material a radially extensible hollow rubber bag having thin flexible extensible walls, the bag when so filled and resting on a flat horizontal surface normally having an axial height not substantially greater than about one-fifth its diameter, and dropping the bag when so filled from said vehicle at said altitude and allowing the bag and its contents to fall freely at high velocity, said altitude being such that the bag reaches its terminal velocity before it strikes the ground, the bag when so filled and falling freely having a shape generally that of an oblate ellipsoid of revolution with a normally upright axis, the bottom wall of the bag being convex during the fall and serving to stabilize the bag so that the axis of the bag remains upright during the fall and as the bag strikes the ground, and opening the bag to remove the material from the bag after the impact with the ground.

25. A method of transporting a free-flowing material from an air vehicle at substantial altitude to the ground below comprising the steps of placing several gallons of said material in a large hollow rubber bag of rounded shape having thin flexible extensible walls of elastomeric material which may be stretched radially several times their normal diameter, causing the bag to drop at a high velocity not materially less than 100 feet per second and to assume an oblate generally ellipsoidal shape while falling at said high velocity, stabilizing the movement of the bag throughout its fall to maintain the axis of the bag in an upright position, yieldably resisting downward movement of the bag so that its terminal velocity is less than 300 feet per second, and stopping downward movement of the filled bag and its contents while stretching the walls of the bag radially outwardly over a period of time sufficient to absorb the shock caused by said stopping without rupturing the walls of the bag.

The references relied on are:

Krupp, 2,423,940, July 15, 1947.

Bradley, 2,430,905, Nov. 18, 1947.

The claims on appeal relate to a process of delivering fluid materials, liquids in particular, from air vehicles to the ground in a freely falling flexible and extendible bag or container without the use of large parachutes and their attendant disadvantages, such as drifting considerably from the intended target or being hung up on trees. The container is freely dropped from the plane and is, according to the two disclosed embodiments, made of rubber and horizontally flat, and is said to fall in upright position and expand upon striking the ground so as to absorb the impact without rupturing. The details of construction of the container and the asserted process are adequately described on pages 10 to 14 of the brief.

Patent No. 2,991,815 was issued to appellant with claims to the herein disclosed bag on application Serial No. 675,981, filed as a division of the instant application after restriction requirement by the examiner between claims to the method and the container structure.

A brief description of the references appears on pages 1 and 2 of the answer.

The examiner has rejected the claims at bar as improper method claims by reason of their inclusion of extensive and specific structural limitations pertaining to the physical characteristics of the container employed in the method, noting that with the exception of the method steps of filling, dropping, and opening the container, the remaining alleged method steps are merely descriptive of the operation and function of the container, and stressing that the disposition of the bag while falling is a characteristic of the bag and can not be considered to constitute a manipulative step distinct from that of dropping the container.

The examiner has further rejected the appealed claims as unpatentable over each of the patents to Bradley and Krupp, taking the position that the steps of filling, dropping and opening a container, which, in his opinion, are essentially all the claims call for by way of method, are shown to be old by each reference. He adds as to Bradley that an alteration in the height from which the container is dropped does not involve any change in the step of dropping as such, and as to Krupp, that the bag includes means, its pear shape exterior design, to stabilize the bag during free fall so that the axis will remain upright during the fall.

Appellant, by his brief and reply brief, has traversed at length both the technical

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and the art rejections of the claims, arguing in substance that the patent statute does not prohibit the use of structural limitation in method claims and numerous decisions have so held, as exemplified by those cited on page 5 of the reply brief, and that such limitations as are not being disclosed by the references should be given patentable weight in determining the question of patentability of the claimed method

[1] We will not sustain the first stated ground of rejection, i.e., that the claims are improper for including specific structural limitations. The patent statute, 35 U.S.C. 100(b), impliedly permits recitations of structure in method claims. Manifestly, the mere inclusion of structure in a method claim does not of itself render the claim unstatutory or fatally defective. Ex parte Kangas, 125 USPO 419, 421.

[2] As to the rejection of the claims on the prior art references, we do not agree with the appellant that such structural limitations as are not disclosed by the references should be given patentable weight. This argument is applicable to claims drawn to structure and not claims drawn to a method. To be entitled to such weight in method claims, the recited structural limitations therein must affect the method in a manipulative sense and not to amount to the mere claiming of a use of a particular structure, which, in our opinion, is the case here. As it was held by the Court of Customs and Patent Appeals in the cases of In re Moreton, 48 CCPA 875, 771 O.G. 295, 288 F.2d 708, 129 USPO 227, and In re Fong et al., 48 CCPA 897, 288 F.2d 932, 129 USPO 264, new use is not among the categories of patentable inventions specified in 35 U.S.C. 101.

The references clearly teach the method concept of transferring fluid material from an aeroplane to the ground by freely dropping a bag containing such material from the aeroplane without the necessity of a parachute. Differences in the height from which the bags are released does not alter the method, being, moreover, mere matters of degree. Both reference bags are yielding and expandable upon impact with the ground to minimize and dissipate impact forces and thereby prevent or minimize rupture. Krupp has further made his bag pear shaped so that it "maintains an upright position or substantially so in its trajectory so that the enlarged end portion 11 takes a forward position for impact," (column 4, lines 57 to 61). He states also (column 4, lines 45 to 53) that the pear shape affords limited flattening when the loaded container rests on a supporting surface and a low center of gravity which prevent tipping even when the supporting surface is in motion.

Appellant argues, in substance, that reference bags are not rubber bags having walls of extremely high tensile strength capable of stretching several hundred percent and are not oblate shape which provides for high air resistance and a relatively low terminal velocity, and that appellant's selection of a bag having these characteristics and results merits method patent protection.

structural limitations in method claims must affect method in manip. sense.

[3] Here again it is our considered opinion that appellant argues the advantages inherently, and necessarily flowing from the specific structural characteristics of the container, and we note in passing that the examiner has apparently recognized these advantages in the container structure in allowing appellant said patent 2,991,815 with claims drawn thereto. It is trite to add that the mere fact that the bag structure has been found patentable does not ipso facto make the herein claimed method, which is, in substance, the intended operation or use of that bag, patentable.

In summary, the distinctions urged by the appellant as lending patentability to the claims over the references, are not attributes of manipulative steps but of the prescribed unchangeable law of operation of the container structure. The container is dropped like the reference containers and, like the latter, from then on nothing is or can be done by man, or under his control, to change its inherent operation. As we have indicated, such uncontrolled operation can not support patentability.

In arriving at our decision, we took into consideration all the arguments and authorities presented in appellant's several briefs, but, for the above stated reasons we are not convinced thereby that the differentiating structural characteristics in the claims result in a new and patentable method over the references, particularly the Krupp patent.

Therefore, the rejection of the appealed claims as unpatentable over the references is sustained.

The decision of the examiner is affirmed.

- End of Case -

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